

# Midwest Clean Diesel Initiative

May 2, 2006

Walt Zyznieuski

Illinois Department  
of  
Transportation

Naperville, IL

# ADVISORY ALTERNATE ROUTES

West Route - Cars and Trucks

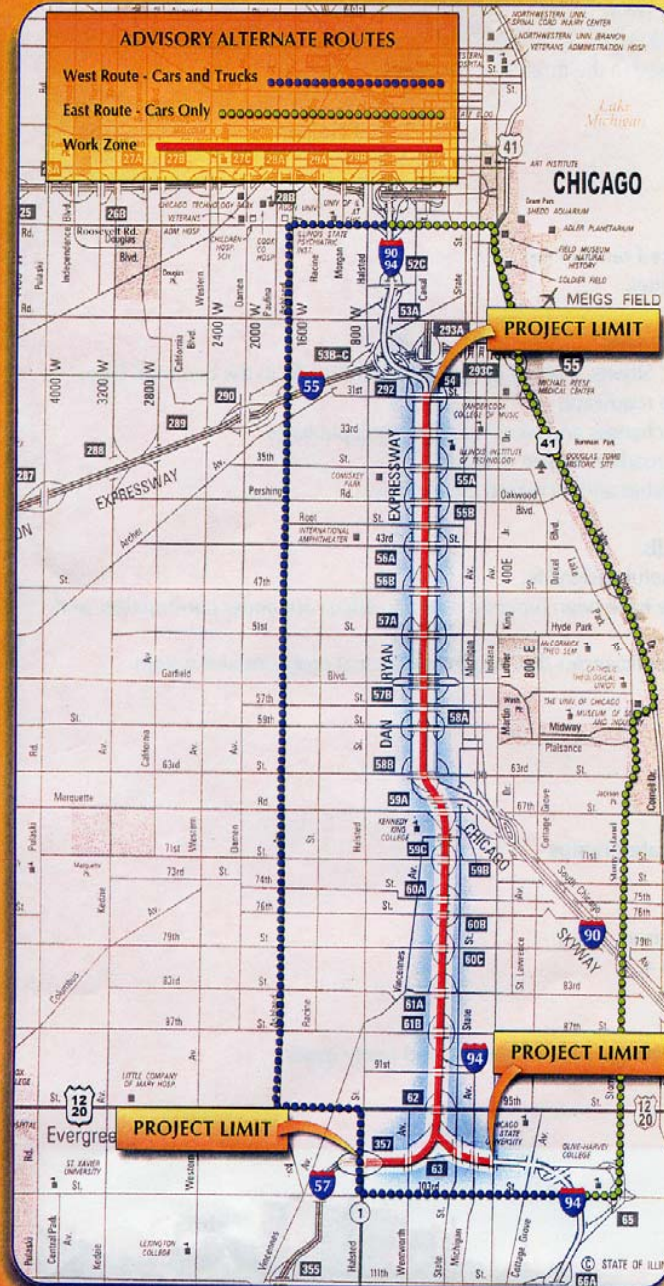
East Route - Cars Only

Work Zone

PROJECT LIMIT

PROJECT LIMIT

PROJECT LIMIT







**ENVIRONMENTAL CLASS  
OF  
ACTION DETERMINATION  
(ECAD)**

**DOCUMENT  
and  
RECORD**

**Dan Ryan Expressway (FAI 94 / 90) Reconstruction  
From 31<sup>st</sup> Street to I-57 / Halsted and I-94 / M.L.K. Drive  
Chicago, Illinois  
August 2003**

## ENVIRONMENTAL COMMITMENTS:

1. IDOT will continue to coordinate with the City of Chicago Department of Transportation (CDOT) and the Chicago Transit Authority (CTA) using the "Dan Ryan Expressway Landscape Guidelines", prepared by CDOT as guidelines throughout Phase II of the project (preparation of contract plans) on the aesthetics and landscaping treatments.
2. IDOT will continue local public involvement activities during the design & contract plan preparation phase.
3. As part of the construction phase IDOT will initiate a comprehensive public relations campaign to notify motorists of construction schedules, lane closures, ramp closures, openings, and alternate travel routes.
4. The ISGS conducted a Preliminary Environmental Site Assessment (PESA) in which they assessed a **high risk** for the occurrence of hazardous materials. A Special Waste Waiver has been approved which allows design approval to be granted prior to the completion of special waste studies. There are still outstanding special waste issues that must be addressed. The Environmental Studies Unit should be contacted at (847) 705-4101 to discuss these issues. To determine the implications of future design changes, please refer to the PESA Review cover memos for ISGS #1106A, as depicted in *Exhibit 7 – Special Waste Waiver* in the Class of Action Determination (ECAD).





# ENVIRONMENTAL ASSESSMENT

Contains:  
Appendix A - EA Exhibits

Dan Ryan Expressway (I-94/90) Reconstruction from  
31st Street to I-57 / Halsted and I-94 / M.L.K. Drive  
Cook County, Illinois

Submitted Pursuant to 42 USC 4332 (2)(c)  
*by the*

U.S. Department of Transportation  
Federal Highway Administration

*and the*  
Illinois Department of Transportation

*Prepared for:*



Illinois Department  
of Transportation  
DIVISION OF HIGHWAYS  
DISTRICT 1



April, 2004









change is being planned within or through the project area. The proposed roadway geometry for northbound Interstate 57 over the southbound Interstate 94 tunnel does not foreclose on any available options for the future extension of the CTA Red Line track as part of the CTA long-range plan.

#### **4.12.3 Railroad Coordination – Chicago Region Environmental and Transportation Efficiency (CREATE) Program**

Further coordination with the CREATE Program will need to occur for the proposed Central Corridor Bridge over the Dan Ryan Expressway.

#### **4.13 Secondary and Cumulative Impacts**

Reconstruction and improvements to the Dan Ryan Expressway will serve existing and planned development, redevelopment areas, and changing economic growth areas of the City of Chicago. The proposed improvements to the Dan Ryan Expressway and the access at interchange areas will not induce any major development or development change which is not already implemented or is in the foreseeable planning stage. Thus, natural resources in the area will not be adversely affected.

#### **4.14 Environmental Commitments**

- IDOT will continue to coordinate with the City of Chicago Department of Transportation (CDOT) and the Chicago Transit Authority (CTA) using the "Dan Ryan Expressway Landscape Guidelines", prepared by CDOT as guidelines throughout Phase II of the project (preparation of contract plans) for the aesthetics and landscape treatments.
- IDOT will continue local public involvement activities during the design and contract plan preparation phase.
- As part of the construction phase, IDOT will initiate a comprehensive public relations campaign to notify motorists of construction schedules, lane closures, ramp closures, openings and alternate travel routes.
- Construction work will be subject to Section 669 Removal and Disposal of Regulated Substances, of the IDOT Standard Specifications for Road and Bridge Construction, as adopted on January 1, 2002. The Final PSI along with special provisions, pay items and quantities were provided to IDOT for insertion into the respective contract plans for construction. In addition a note stating, "The General Contractor is required to hire an Environmental Firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is prequalified in hazardous waste by IDOT to remediate the soil contamination and monitor for worker protection." All questions regarding the Final PSI report should be directed to the IDOT Bureau of Programming/Environmental Studies Unit at (847) 705-4101.
- As a result of air quality recommendations from the Dan Ryan Taskforce, the Illinois Department of Transportation has committed to investigating these issues further to determine what measures can be implemented.

Federal Highway Administration  
**FINDING OF NO SIGNIFICANT IMPACT**

**INTERSTATE 94/90**

**Dan Ryan Expressway between 31<sup>st</sup> Street and I-57/Halsted Street (Illinois Route 1)  
and I-94/Martin Luther King Drive, in the City of Chicago, Cook County, Illinois**

The purpose of the project is to provide a safe, efficient, reconstructed transportation facility along the Dan Ryan Expressway (I-94/90). It will serve through traffic and adjacent urban land uses for the Chicago metropolitan area, between 31<sup>st</sup> Street and I-57/Halsted Street (Illinois Route 1) and I-94/Martin Luther King Drive. The proposed improvement will serve to meet the needs of traffic safety and mobility as well as addressing substandard ramp geometry, facility degradation and roadway drainage deficiencies.

The proposed project involves reconstructing the Dan Ryan Expressway south of the Chicago Central Business District (CBD). Improvements include the following:

- New pavement and pavement resurfacing
- Added travel lanes
- Retaining walls
- New bridge, bridge widening, and bridge replacement
- Traffic safety barriers
- Upgrade of substandard ramp geometry and vehicle weaving distances including added auxiliary lanes
- Consolidation and/or relocation of expressway access (removing and adding ramps) as necessary
- Upgrading the Chicago Skyway interchange
- Improving frontage roads as necessary
- Traffic signal modernization
- Roadway lighting
- Roadway drainage improvements
- Accident investigation sites
- Landscaping with aesthetic treatments
- Maintaining access to transit facilities

Within the project termini, the proposed improvements of Scenario #3 (Preferred Alternate), as described in the Environmental Assessment (EA), will have independent utility and will function without any requirements for additional improvements elsewhere. The project will not restrict consideration of alternatives for other reasonably foreseeable transportation improvement initiatives to this facility or to other facilities in the Chicago Metropolitan Area.

This project is funded as part of the Illinois Department of Transportation's 2005–2011 Proposed Highway Improvement Program released April 22, 2004.



Information System {CERCLIS} list) has been reviewed. The undertaking as proposed will not require right-of-way from a site included in the CERCLIS database last updated June 24, 2004.

An open house format public hearing was held on Friday, May 7, 2004 from 3 p.m. to 7 p.m. in the South Shore Cultural Center located at 7059 South Shore Drive, City of Chicago, Illinois 60649. There were 478 people that signed the attendance register. Many attendees did not sign in so the exact number of persons attending the open house public hearing is not accurately known. There was emphasis placed on community outreach concerning potential health impacts of the reconstruction project and risks during construction. Comments received were considered and addressed by the Illinois Department of Transportation. All questions and requests for information were responded to by the Illinois Department of Transportation. The complete compilation of these comments, questions and responses is contained in the Errata.

Specific commitments for the project include:

- IDOT will continue to coordinate with the City of Chicago Department of Transportation (CDOT) and the Chicago Transit Authority (CTA) as required through the completion of construction. The "Dan Ryan Expressway Landscape Guidelines" prepared by CDOT will be used as a basis for developing project aesthetic and landscape treatments.
- IDOT will continue local public outreach activities through completion of construction, to ensure the public remains informed about the project. As part of the construction phase, IDOT will have a comprehensive public information campaign to notify the public of construction schedules, lane closures, ramp closures, openings and alternate routes.
- Construction work will be subject to Section 669 (Removal and Disposal of Regulated Substances), of the IDOT Standard Specifications for Road and Bridge Construction, as adopted on January 1, 2002. The final Preliminary Site Investigation along with special provisions, pay items and quantities were provided to IDOT for insertion into the respective contract plans for construction. In addition, the General Contractor will be required to hire an Environmental Firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by IDOT to remediate the soil contamination and monitor for worker protection. All questions regarding the Final PSI report should be directed to the IDOT Bureau of Programming/Environmental Studies Unit at (847) 705-4101.
- As presented at the Public Hearing, and as a result of comments pertaining to air quality, including potential health and respiratory concerns, IDOT is pursuing strategies to address construction related air quality concerns. These strategies include requiring detailed dust control plans, and the reduction of construction equipment idling times. In addition, all diesel powered non-road construction equipment with engine horsepower (HP) ratings of 50 – 300 HP will be prohibited from using "off-road" diesel fuel. In addition, diesel powered construction equipment within this HP range shall be either (1) retrofitted with Emissions Control Devices *and* use Cleaner burning "on-road" diesel

fuel, or (2) use Ultra Low Sulfur Diesel fuel only, in order to reduce diesel particulate emissions. These strategies will be addressed in a construction Special Provision being developed by IDOT for the Dan Ryan reconstruction project.

- IDOT will secure the services of an environmental consultant to develop and implement a program to monitor air quality in and around the Dan Ryan reconstruction project, including staging areas and batch plants.
- IDOT will work with the contractors and City of Chicago authorities, including City Aldermen, in the selection of staging areas and construction batch plant locations, whether within or outside the existing highway ROW, to avoid locations near sensitive areas or populations to the extent possible.
- IDOT will prepare pre-construction photo and/or video logs of structures directly adjacent to the highway ROW, and of the frontage road system within the project limits, to document structural condition prior to Dan Ryan reconstruction.
- IDOT will implement a construction special provision to incorporate variable width and skewed "tining" of the new concrete pavement to reduce tire-pavement highway traffic noise.

The FHWA has determined that the Preferred Build Alternative, identified as "Scenario #3" in the Environmental Assessment, will have no significant impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the attached Environmental Assessment and the Environmental Assessment Errata which have been independently evaluated by the FHWA and determined to adequately and accurately assess the need, environmental issues, and impacts of the proposed project, and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the attached Environmental Assessment and Environmental Assessment Errata.

June 24, 2004  
Date

  
For Federal Highway Administration

## CONSTRUCTION AIR QUALITY - DUST CONTROL

Description. This work shall consist of developing and implementing a detailed Dust Control Plan (DCP). Development of a DCP is required in "Non-attainment" and "Maintenance" areas, per Article 107.36 of the Standard Specifications. All construction activities shall be governed by the DCP. The nature and extent of dust generating activities, and specific control techniques appropriate to specific situations shall be discussed at the pre-construction meeting, with subsequent development of the DCP to include but not be limited to the requirements below.

The Contractor is responsible for the control of dust at all times during the duration of the contract, 24 hours per day, 7 days per week, including non-working hours, weekends, and holidays. This work shall be considered complete after the completion of all permanent erosion control measures required for the contract, and after all temporary and permanent seeding has taken place. Work on this contract shall be conducted in a manner that will not result in generating excessive air borne particulate matter (PM) or nuisance dust conditions.

The DCP shall include legible copies of the product literature and Material Safety Data Sheets for dust suppression agents and stabilizers the contractor proposes to use. The Dust Control Plan shall involve the implementation of control measures before, during and after conducting any dust generating operation. These controls must be in place on non-working days and after working hours, not just while work is being done on the site. The Dust Control Plan must contain information specific to the project site, proposed work, and dust control measures to be implemented. A copy of the Dust Control Plan must be available on the project site at all times.

The Dust Control Plan must contain, at a minimum, all of the following information:

- Name, address and phone number of the person(s) responsible for the dust generating operation and for the submittal and implementation of the Dust Control Plan.
- A drawing specifying the site boundaries of the project with the areas to be disturbed, the locations of the nearest public roads, and all planned exit and entrance locations to the site from any paved public roadways.
- Control measures to be applied to all actual and potential fugitive dust sources before, during and after conducting any dust generating operation, including non-work hours and non-work days.
- A list of dust suppressants to be applied, including product specifications, material data safety sheets, and label instructions that include the method, frequency and intensity of applications. Information on the environmental impacts and approval or certifications related to the appropriate and safe use for ground applications.
- A contingency plan consisting of at least one contingency measure for each activity occurring on the site in case the primary control measure proves inadequate.

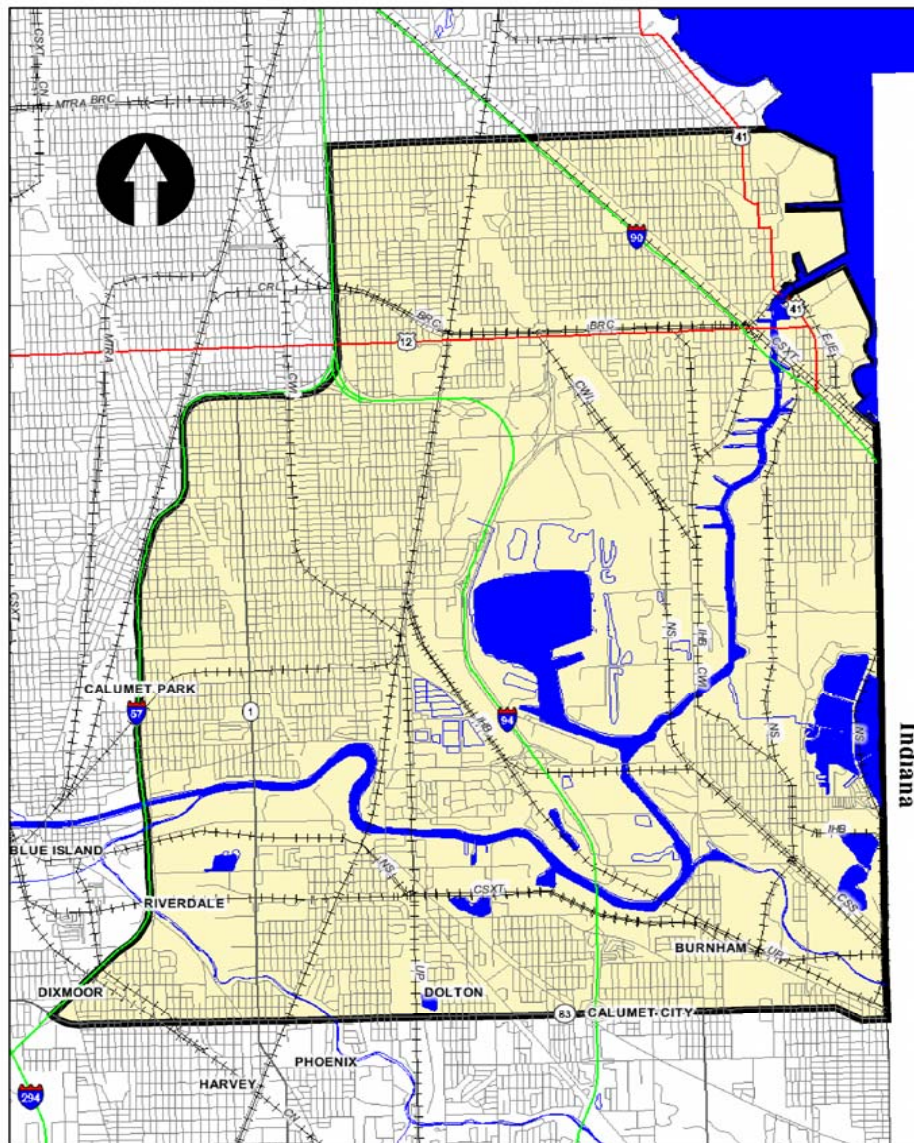
The Contractor shall submit two copies of the DCP that outlines in detail the measures to be implemented by the Contractor complying with this section, including prevention, cleanup, and other measures at least 30 days before beginning any dust generating activity. The Contractor shall not begin any dust generating activities until the Engineer approves the DCP in writing. Failure to comply with the DCP or provisions herein will subject the contractor to an "Environmental Deficiency Deduction," as outlined below.



## MITIGATION STRATEGIES

- DUST CONTROL PLAN
- EMISSION CONTROL DEVICE AND “ON ROAD” DIESEL FUEL, OR
- ULTRA LOW-SULFUR DIESEL FUEL
- REDUCE IDLING
- AIR QUALITY MONITORING

# Lake Calumet PM10 Non-Attainment Area



## Legend

- |  |                |  |           |
|--|----------------|--|-----------|
|  | Interstates    |  | Roads     |
|  | US Highways    |  | Railroads |
|  | State Highways |  | Streams   |



Illinois EPA

## Scale

0 0.5 1 2 Miles



LANE  
NARROWS



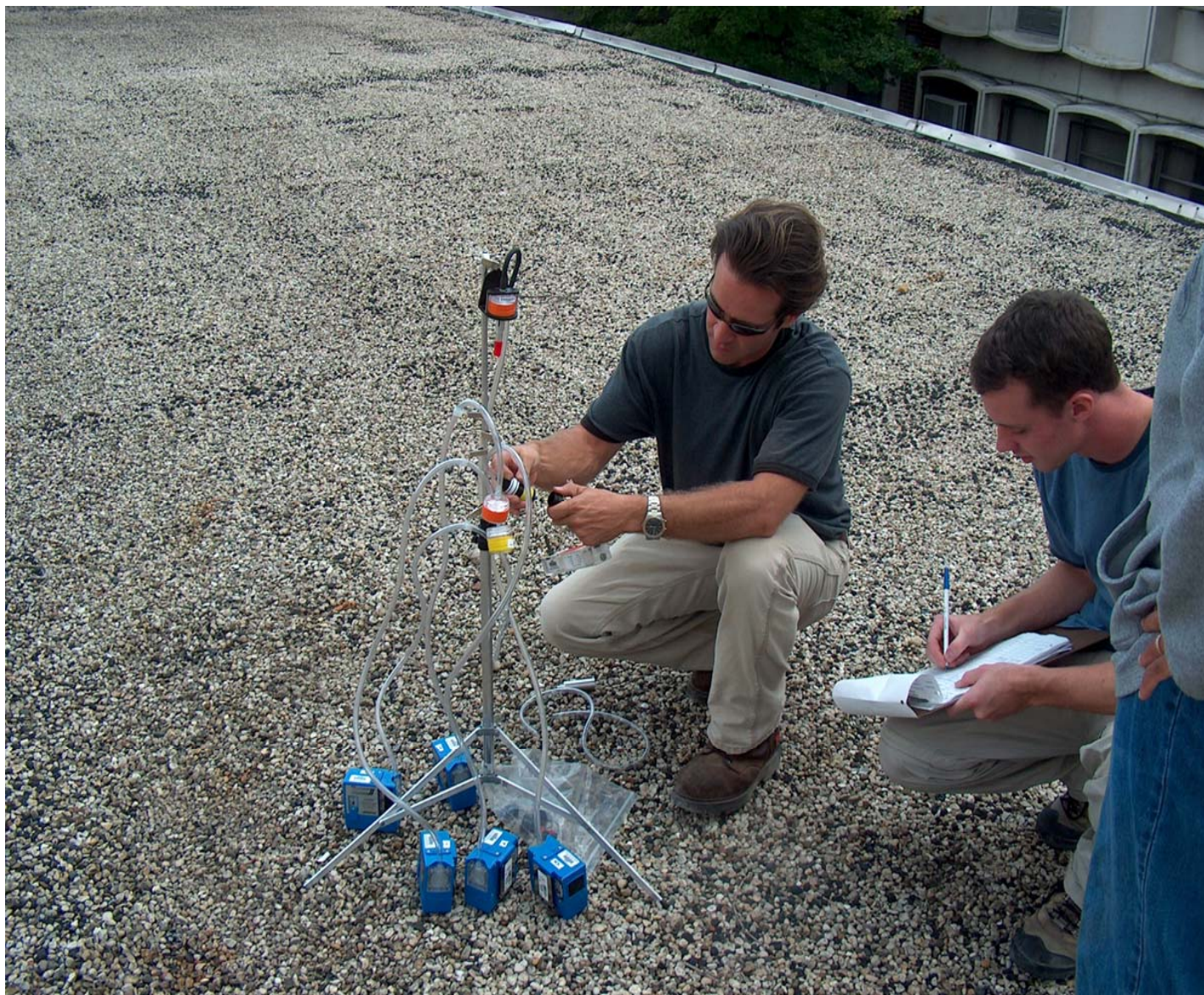




















**Table A-1**  
**Air Sampling Parameters, Analytical Methods, Pump Type and Flow Rates**

<b>Analyte</b>	<b>Method</b>	<b>Flow Rate LPM</b>	<b>Pump Type</b>
Total Dust	NIOSH 0500	1.0 - 2.0	Gillian BDX II
Respirable Silica	NIOSH 7500	2.5	Gillian BDX II
Particulate Matter PM10	EPA Equivalent		Partisol FRM 2000 Air Sampler
Particulate Matter PM2.5	EPA Equivalent		Partisol FRM 2000 Air Sampler
Lead in Air	OSHA ID- 121/125	1.0 - 4.0	Gillian BDX II
Asbestos in Air	NIOSH 7400	0.5 - 16.0	Gillian BDX II
Diesel Components (identify 3 peaks)	NIOSH 5506	2.0	Gillian BDX II

# Dan Ryan Project

- How Many Pieces of Construction Equipment have been Retrofitted?
- How Many Gallons of Ultra Low Sulfur Diesel Fuel have been used?



# Dan Ryan Project

- 1+ oxidation catalyst has been installed
- 106,400 gallons of ULSD have been burned

- Has IDOT implemented their Clean Air Strategies on other Projects?

- IDOT has implemented their Clean Air Specifications on four contracts on the Kingery Reconstruction project, beginning with the November 2005 construction lettings.

**QUESTIONS?**